



**EVALUATION OF COMPETENCY - BASED TVET CURRICULUM IN SUNAS:
IMPLICATION FOR PROGRAM ENHANCEMENT**

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ABSTRACT

This paper evaluates the implementation of competency-based TVET curriculum embedded in the 2-year Hotel and Restaurant Management (HRM) Course in Surallah National Agricultural School (SUNAS) and offers policy framework as a set of indicative recommendations to enhance program implementation. The need for program evaluation becomes urgent in the wake of the ASEAN integration requiring Philippine skilled workforce to be globally competitive and be able to respond to the challenges of a growing economy. These TVET programs namely: Bartending NC II, Food and Beverage Services NC II, Cookery NC II, and Housekeeping NC II had been running for the last 10 years however, no evaluation was made so far to point out specific areas for enhancement since its inception in 2007. The study employed mixed research type where percentages, mean values, and standard deviation were employed to analyze the quantitative data and content analysis for qualitative data. A total of 178 samples who were purposively selected for the study consists of 128 trainees, 4 trainers teaching the 4 TVET programs, 16 industry partners and employers, 5 members of the Regional Expert Panel for Competency-Based Training (REP-CBT), the Curriculum Head, the Vocational Instruction Supervisor, and the Vocational School Superintendent. In general, the study revealed that competency-based TVET curriculum in SUNAS was successfully implemented. Based on the findings, it is recommended that SUNAS needs to enhance teachers' competence in developing competency-based learning materials to guide students in learning the required competencies. The biggest challenge faced by stakeholders in implementing competency-based TVET curriculum is the competence of teachers in developing a standard Competency-Based Learning Materials (CBLMs) for the trainees because this is a very critical component in the program delivery of competency-based instruction.

Keywords: competency-based, TVET curriculum, TESDA, evaluation

INTRODUCTION

Education plays a vital role in the social and economic development of a nation. In particular, TVET plays a great role in social, economic, and political development of a nation together with its academic counterpart because TVET facilitates in developing skilled human resource, enhance industrial productivity and improve quality of life. Strengthening the importance of TVET, Sharma (2008) argued that while education in general is a key to development, TVET is a master key because it has the ability to open all doors of the lifelong learning, reduce unemployment and improve the quality of living.

It should be noted, however, the challenges and opportunities of TVET are unique due to the needs of the changing economy of a dynamic world. The concern in today's knowledge-driven and competitive global economy is not so much about the value and importance of TVET but how to ensure that it is relevant, responsive and valued in an increasingly global economy (Law, 2007). Undoubtedly, the proper development of technical and vocational skills is vital to the economic development of the nation especially the developing ones. The realization of these roles can be best achieved when competency-based TVET program is adopted.

According to UNESCO and Allan, there are different issues prompting competency-based TVET curriculum. First, radically different frameworks in the economic and social aspects in the 21st century have a profound implication on education. The globalization of trade and commerce brought about by the emergence of new technologies and its rapid changes, the emergence of knowledge-based economy, and the information and communication technology (ICT) revolution are all bringing together new challenges among countries in the world. These challenges and intense international competition have forced countries to give attention once again to the roles of education in preparing the youth for productive employment (Khambyat and Shymal, 2010). Thus, the relevance and effectiveness of competency-based training program offered in schools are very crucial because the effectiveness of TVET program depends on the philosophy of curriculum design to prepare competent graduates who can cope up with the ever-changing economic situations of the world. The second issue is the problem of poverty. A great number of people in developing countries live under poverty and this number grows dramatically. In order to abate this problem, reforms have been implemented and one of these is education, specifically competency-based TVET program which is believed to minimize if not solve poverty. According to Oloruntegbe (2010), a productive and self employment achieved based on properly designed competency-based TVET curriculum could be the best weapon in fighting poverty. The third issue is unemployment among the youth. Many countries have been facing serious pressure from youth unemployment although opportunities for skilled workers do exist in their economy. This situation has brought into sharp focus the mismatch between the curriculum taught in schools and labor market demand, (UNESCO, 2007). One of the best strategies used to fill the gap in mismatch between curriculum, labor market and unemployment problem is to develop competency-based TVET curriculum. This is how developed countries like Australia, Britain and the United States of America addressed this issue by providing relevant competency-based curriculum in their TVET program, (UNESCO (2007). TVET is an education program mainly designed to help learners acquire the knowledge, practical skills, and understanding necessary for employment in a particular occupation, trade or a group of occupations.

In the Philippines, competency-based TVET program is envisioned to create a competent, motivated, adaptable and innovative workforce thereby contributing to poverty reduction and improving social and economic development. Competency-based TVET is envisioned to increase the number of citizens who find gainful employment and self employment in different economic sector of the country. Hence, TVET providers around the country need to develop curricula that will improve the lives of the Filipino people and will push for a vibrant social and economic development of the country. It is believed that this workforce can contribute to poverty reduction and socio-economic development of the nation by facilitating demand-driven and high quality TVET that is relevant to all sectors.

TESDA manages the TVET sector in the Philippines by regulating the operations of the private technical vocational institutes (TVIs) and participating directly in training provision by operating several TESDA training institutes (TTIs). As of 2015, TESDA manages 122 TTIs

consisting of 16 regional training centers (RTCs), 45 provincial training centers (PTCs), 18 agricultural schools, 7 fishery schools, 31 trade schools and 5 specialized institutions. It regulates the TVIs through mandatory program registration. Before a Certificate of Program Registration (CoPR) is issued, site visits are conducted.

Over the past years, it was noted that TVET programs lack relevance to the workplace reality as unemployment remains a problem in our country. Major TVET reforms and programs have been implemented with the aim of providing the Filipino workforce with competencies within the standards set by employers and industries and enabling them to be globally competitive and prepare them for gainful employment and/ or sustainable livelihoods. Apparently, these initiatives and reforms did not show much success. Problems on poverty, unemployment, and skill mismatch are widespread around the country. Hence, a need to look into how these TVET programs are being implemented among TVET institutions may help curb the problem.

On this note, it becomes very crucial to evaluate the implementation of competency-based TVET curriculum in the country. While SUNAS has been offering competency-based TVET curricula for the last 10 years, evaluation of its curricular programs have not been made. Hence, the researcher felt this need.

This study therefore, is expected to contribute to TVET program administration in the Philippines especially to those involved in the curriculum design and implementation. Furthermore, the findings of the study are believed to provide alternative approaches to policy makers, stakeholders, TVET leaders, teachers and researchers in implementing CBTC in the country. Finally, it may also serve as a spring board for the researchers who are interested to pursue related studies in the future.

In the light of the preceding realities, this study examines the implementation of competency-based TVET curriculum in TESDA Region XII particularly the Surallah National Agricultural School (SUNAS) in Surallah, South Cotabato in its mandate to provide quality TVET. Furthermore, it evaluates the challenges faced by its stakeholders in the implementation of competency-based TVET curriculum, and the performance of graduates in TESDA national assessment and their workplace performance as perceived by industry partners and employers. Consequently, results of this study offered policy framework to enhance TVET program implementation in SUNAS.

METHOD[bg1]

The purpose of this study was to evaluate the implementation of competency- based TVET curriculum in SUNAS particularly the four (4) TVET programs embedded in the 2-Year Hotel and Restaurant Management (HRM) Course namely: 1) Bartending NC II; 2) Food and Beverage Services NC II; 3) Cookery NC II; and Housekeeping NC II. It also sought to evaluate how learning materials were prepared, the influence of industry-SUNAS linkage, the impacts of teachers' training, the perceptions of trainees and trainers in the implementation, the trainees' performance in the national assessment, and the performance of graduates as perceived by industry partners and employers.

RESULTS AND DISCUSSION^[bg2]

The evaluation study on the implementation of competency-based TVET curriculum in SUNAS is based on the responses of one hundred fifty-five respondents involved in the study.

The findings to the various sub-problems of the study are presented, analyzed and interpreted under the following headings: *I. Implementation of Competency-Based TVET Training* with the following sub-headings; a) learning materials; b) teachers' training; c) linkage with industry and other sectors; d) trainees' perception; e) trainers' perception; and f) performance in the National Assessment; *II. Challenges Encountered by Teachers and Trainees in the Implementation of Competency-Based Training*; *III. Performance of Graduates as Perceived by Industry Partners and Employers*; and *IV. Policy Framework to Enhance Program Implementation in SUNAS*.

I. Implementation of Competency- Based TVET Curriculum

This section deals on the implementation of competency-based TVET curriculum which is divided into six sub-components namely: curriculum design and delivery, learning materials, teachers' training, linkage with industries and other sectors, trainees' perception, teachers' perception, and performance of graduates in the national assessment.

Table 3.1 shows the overall level of implementation of competency- based TVET training by program and by sub-components.

Components	Bartending NC II	Food & Beverage Services NC II	Cookery NC II	Housekeeping NC II	Average Weight	Descriptive Equivalent
	Mean					
Curriculum Design and Delivery	4.32	4.27	4.27	3.95	4.20	Above Average
Learning Materials	1.40	1.08	1.55	1.00	1.21	Very Poor
Teachers' Training	3.16	3.49	3.06	3.34	3.26	Average
Linkage with Industry and other Sectors	2.82	2.82	2.82	2.82	2.82	Average
Trainees' Perception	4.55	4.38	4.56	4.59	4.52	Excellent
Trainers' Perception	4.36	4.33	4.48	4.24	4.35	Above Average
Trainees' Performance in National Assessment	4.70	5.00	5.00	4.90	4.90	Excellent
Grand Mean	3.62	3.62	3.68	3.55	3.61	Above Average

Based on the results of the study, the overall implementation of competency-based TVET curriculum in SUNAS is *above average* with a grand mean of 3.51. Table 3.1 further shows the level of implementation by sub-components. For curriculum design and delivery, the obtained average weight is 4.20; learning materials is 1.21; teachers' training is 3.26, linkage with

industries and other sectors is 2.82, trainees' perception is 4.52, teachers' perception is 4.35, and trainees' performance in National Assessment is 4.9. The obtained average weight indicates an *above average* level of implementation of competency-based TVET curriculum.

The overall level of implementation showing an *above average* rating implies that competency-based TVET curriculum is properly implemented in SUNAS in the four TVET programs namely: Bartending NC II, Food and Beverage NC II, Cookery NC II, and Housekeeping NC II. When analyzed by sub-components, trainees' perception and performance in the National Assessment ranked the highest as showed by an average weight of 4.52 and 4.9 respectively while learning materials was ranked the lowest. This implies that even with very poor learning materials, the delivery the program was carried out properly in that the trainees learned the required competencies in each of the TVET programs embedded in the 2-year HRM. This is evident by the excellent performance of the trainees in the National Assessment. Furthermore, trainees' and teachers' positive perception on program implementation may have contributed to their excellent performance in the National Assessment.

A discussion on the level of implementation of competency-based TVET curriculum by sub-components and by TVET program is presented below:

a) Curriculum Design and Delivery

Table 3.2 shows the responses of trainees and trainers under curriculum design and delivery component in the curriculum implementation by TVET program.

Curriculum Design and Delivery	Bartending NC II	Food & Beverage Services NC II	Cookery NC II	Housekeeping NC II	Mean	Descriptive Equivalent
	Mean					
Identification of Competencies	4.56	4.31	4.43	3.93	4.30	Above Average
Teaching- Learning (Presentation)	4.57	4.48	4.44	4.00	4.46	Above Average
Competency-Based Learning Materials (CBLM)	3.28	3.32	3.42	2.04	3.01	Average
Entrepreneurship Instruction	4.12	4.43	4.22	4.24	4.25	Above Average
Assessment	4.64	4.64	4.53	4.78	4.64	Excellent
Record Keeping	4.79	4.49	4.68	4.71	4.66	Excellent
Overall	4.32	4.27	4.27	3.95	4.20	Above Average

The overall mean of the curriculum and design is 4.20 showing an *above average* rating. For identification of competencies, the obtained mean is 4.30; teaching-learning is 4.46; learning materials is 3.01; entrepreneurship instruction is 4.25; assessment is 4.64; and record keeping is 4.66.

a.1 Identification of Competencies

Table 3.3 presents the responses of trainees and trainers in identification of competencies component of curriculum design and delivery. The obtained mean is 4.56 for Bartending NC II,

4.31 for Food and Beverage Services NC II, 4.43 for Cookery NC II, and 3.93 for Housekeeping NC II. The obtained overall mean of 4.30 indicates ‘*above average*’ level of implementation in the identification of competencies in TVET training.

Identification of competencies	Bartending NC II	Food & Beverage Services NC II	Cookery NC II	Housekeeping NC II	Mean	SD
Competencies to be achieved were carefully selected and were relevant to occupation.	4.13	4.00	4.25	3.62	4.00	2.00
Competencies were updated regularly involving industries communicated by my trainer.	4.75	4.00	4.37	4.12	4.31	2.08
Competencies to be achieved were communicated to the trainees at the start of the training.	4.75	4.62	4.50	4.37	4.56	2.14
Competencies to be achieved were specific, precise and well stated in a written form.	4.62	4.62	4.62	3.62	4.37	2.09
Overall	4.56	4.31	4.43	3.93	4.30	2.07

Results of the study show that competencies to be achieved by the students are carefully selected and relevant to the particular occupation; they are updated regularly involving industries and communicated by the trainer at the start of the training. Furthermore, they are specific, precise, and printed in the competency-based learning material (CBLM).

In this sub-component, the overall mean of 4.30 or *above average* implementation could be attributed to TESDA’s effort in coming up with Training Regulations accessible to both trainers and trainees where competencies to be achieved by the trainees are not only printed on the said document but are also printed on the CBLM developed by the trainers for the students and a 4x6 feet tarpaulin posted in the training centers. In addition, above average result can be attributed to moderation activities facilitated by TESDA in the national level where trainers are gathered together with the experts in the industries to discuss and learn the latest practices or trends in the field. As an off shoot of the moderation activity, trainers are subjected to rigorous assessment conducted by an accredited TESDA national assessor to ensure that trainers are competent to teach the new competencies as they go back to their institutions. Another reason can be attributed to the regular conduct of orientation by trainers at the start of the training which also provides trainees the opportunity to get familiar with the competencies they need to achieve during the training. The table above shows the responses of trainees and trainers under identification of competencies component of curriculum implementation by TVET program.

Under *identification of competencies* (Table 3.3), all items such as: ‘competencies to be achieved were carefully selected and were relevant to occupation’ (4.00), competencies were updated regularly involving industries communicated by my trainer’ (4.31), competencies to be achieved were communicated to the trainees at the start of the training’ (4.56), and ‘competencies to be achieved were specific, precise and well stated in a written form (4.37) were rated above the mean on the scale running from 1 to 5. This was supported by the interviews held with the Vocational Instruction Supervisor and focus group discussions made with the Curriculum Head. All those interviewed agreed on the importance of identifications of

competencies because these competencies learned by students are the specific tasks required in the workplace.

In support of this, one interviewee remarked:

“Careful selection of competencies was done by industry experts with TESDA management and staff and these are reflected in the TESDA Training Regulations.”

Another trainer-interviewee supported this idea by saying:

“These competencies are regularly updated involving industry experts through ‘moderation’ where we trainers all over the country are gathered to a training-workshop to present the modifications made. This is followed by an immersion in an identified industry to learn the new competencies. Then, a rigorous assessment is made to ensure that we are competent to deliver the new competencies before we go back to our institution and implement the new competencies as part of the TVET program.”

Similarly, in the focus group discussions made, all participants agreed that trainers conduct orientation with the trainees to discuss competency-based approach in teaching their TVET programs. During orientation, competencies to be achieved are communicated and these are printed in their competency-based learning materials (CBLM) and/or in their desktop computers stationed at their training centers. Trainees may access from these computers to view their CBLM anytime they want.

Competencies to be achieved by the trainees need to be publicized in advance for effective implementation of competency-based curriculum. This idea is consistent with NCTVET (2006), which has indicated that, in competency-based instruction, trainees are informed about the criteria and attitudes that are important to the occupation. Furthermore, competencies to be achieved need to be specific, precise and stated in written form. Again, this idea corresponds with the work of Brown (1994), which indicates that, one of the characteristics of competency based instruction is that whatever students learn is based on specific, precisely stated outcomes that have been recently identified as being essential for successful employment in occupation for which the trainee is being trained.

a.2 Teaching- Learning (Presentation)

The obtained mean is 4.57 for Bartending NC II, 4.48 for Food and Beverage Services NC II, 4.44 for Cookery NC II, and 4.00 for Housekeeping NC II. The obtained overall mean of 4.46 indicates ‘*above average*’ level of implementation of the teaching- learning (presentation) component of competency-based TVET training.

Results of the study confirm that generally, the principles of competency-based TVET curriculum are manifested in teaching-learning (presentation) except the item, ‘*trainees learned at their own pace*’. The component such as: the role of the trainer was to facilitate learning; knowledge, skills and attitude were integrated in the teaching learning activities; teaching-learning activities were interactive; trainees were asked to demonstrate their competencies during learning; learning was modular in structure; learning was done in real work situation; instruction for each task package was always supported by practice; trainers provided Immediate feedback on trainee’s performance after each practice; incorrect practices during the performance of each task package was detected and corrected.; trainees were allowed to practice tasks correctly before being evaluated/ assessed.; learning activity was reinforced until competency is achieved;

advanced students were tasked to mentor other learners to develop/ reinforce their leadership skills and interrelationships.

The overall mean of 4.46 or ‘*above average*’ implementation in this sub-component could be attributed to the trainers’ mastery in adopting competency-based approach in teaching their particular TVET program as shown by their teaching experience. Secondary data shows that the trainers in Bartending NC II, Food and Beverage Services NC II, and Cookery NC II having the first three highest mean had been teaching their TVET program since its inception in SY 2007-2008 while the trainer in Housekeeping NC II had taught the program for only four years.

The table 3.4 shows the responses of trainees and trainer under teaching-learning (presentation) component of curriculum implementation by TVET Program.

Teaching- Learning (presentation)	Bartending NC II	Food & Beverage Services NC II	Cookery NC II	Housekeeping NC II	Mean	SD
The trainers’ role was to facilitate learning.	4.50	4.50	4.62	4.50	4.53	2.13
Knowledge, skills and attitude were integrated in the teaching learning activities.	4.75	4.50	4.25	4.50	4.50	2.12
Teaching- learning activities were interactive.	4.25	4.12	4.12	3.62	4.02	2.00
Trainees learned at their own pace.	3.25	4.00	3.25	3.75	3.56	1.89
Trainees were asked to demonstrate their competencies during learning.	4.75	4.62	4.75	4.50	4.65	2.16
Learning was modular in structure	4.50	4.37	4.37	4.37	4.40	2.10
Learning was done in real work situation.	4.88	4.75	4.62	4.37	4.65	2.16
Instruction for each task package was always supported by practice.	4.75	5.00	4.75	4.62	4.76	2.18
Trainers provided Immediate feedback on trainee’s performance after each practice.	4.88	5.00	4.25	4.87	4.75	2.18
Incorrect practices during the performance of each task package was detected and corrected.	4.88	4.25	4.25	4.87	4.56	2.14
Trainees were allowed to practice tasks correctly before being evaluated/ assessed.	5.00	4.37	4.62	4.75	4.68	2.16
Learning activity was reinforced until competency is achieved.	4.75	4.62	4.62	4.50	4.62	2.15
Advanced students were tasked to mentor other learners to develop/ reinforce their leadership skills and interrelationships.	4.38	4.25	4.37	4.50	4.37	2.09
Overall	4.57	4.48	4.37	4.44	4.46	2.11

The other important point to be considered in the implementation of competency-based TVET curriculum is the teaching- learning (presentation) in the classroom. As indicated in Table 5, all items in this subgroup were responded above the mean by the respondents. Although all items under this subgroup were responded above the mean by trainees and trainer, ‘*trainees learned at their own pace*’, has relatively lower values than the remaining items. One reason is that, most trainees have problems with English language comprehension. Thus, trainers need to assist them in understanding and coping with their lessons.

The qualitative data obtained from interviews and focus group discussions also support these findings. Competency-based teaching- learning activity requires capable teachers to effectively teach both knowledge and skills for its effectiveness. This may also be the reason why the item, ‘teaching- learning activities were interactive’ (4.02) has the second lowest value.

In view of this, one interviewee stated that:

“There is a problem with the implementation of competency-based curriculum in the classroom. The capacity of the trainers is challenged by this scenario. Hence, there is a need to develop the trainers’ ability to engage trainees in the classroom especially in teaching knowledge concepts like different teaching methodologies to solve this problem. This is the reason why the basic principle that says, in competency-based training, trainees learn at their own pace may not be realized in our institution.”

The focus group discussions also supported the findings on the problems of teaching- learning (presentation) related to the issues mentioned above. In view of this, one focused group discussion participant narrated:

“As there are problems related to English language difficulty by most students, mentoring slow learners by very few advance learners was encouraged to be able to assist them cope with the required set of competencies otherwise, they may not be able to finish the sets of competencies within the set duration.”

This scenario shows that the core principle of competency-based training that is, *trainees learn at their own pace* is not totally followed. Instead, strategy like mentoring was employed to address learners’ difficulty with the English language. In competency based TVET training, one of the basic characteristics is that trainees are trained at their own pace. The idea of self-paced instruction was supported by the work of Watson (1991), who stated that competency based instruction is characterized by self-paced learning. Self-paced instruction is characterized by allowance being made for trainees to move through a course at different rates. This implies that competency-based TVET instruction normally allows students to acquire the specific competencies more or less at their own pace of learning through variety of self-paced learning strategies and materials and frequent feedback. Self-paced learning is more flexible and self-satisfying. It develops habits of self-reliance and independence, thereby helping the trainees in gaining and holding employment, which is the core principle of competency based instruction. It allows open entry and open exit practices to be followed by TVET institutions so that trainees will have the opportunity to quit and return based on their need. This idea complements the view of Nizam’s et al. (2009), which states that the self-paced nature of the approach allows opportunities for higher ability students to undertake extension work.

SUNAS does not practice open entry and open exit because TVET programs are offered by semester, hence it is violating this principle. All TVET program are embedded with some general education subjects like English, Math, Filipino, Social Sciences and allied subjects. As the trainee finishes the 2-year HRM Course, he/she also completes four (4) TVET programs.

a.3 Competency-Based Learning Material (CBLM)

To assess the quality of designed learning materials, TESDA assessment rubric was used. Scores were assigned The obtained mean is 3.28 for Bartending NC II, 3.32 for Food and Beverage Services NC II, 3.42 for Cookery NC II showing ‘above average’ level of

implementation, and 2.04 or ‘*below average*’ level for Housekeeping NC II. The obtained overall mean of 3.01 indicates an ‘*average*’ level of implementation of the CBLM component of competency-based TVET training. Table 3.5 presents the responses of trainees and trainers in learning materials component of curriculum implementation by TVET program.

Learning Material	Bartending NC II	Food & Beverage Services NC II	Cookery NC II	Housekeeping NC II	Mean	SD
Learning materials were organized.	2.88	3.12	3.38	1.64	2.76	1.66
Learning materials for instruction were appropriate to the tasks.	2.88	3.18	3.32	1.96	2.84	1.69
Learning materials were available for every task.	3.25	3.06	3.12	1.88	2.83	1.68
Relevant tools, materials, equipment and machines were available during instruction.	4.69	4.78	4.25	3.87	4.40	2.10
Learning materials were effectively utilized during instruction.	3.25	3.10	3.37	1.42	2.79	1.67
Learning materials were comprehensive.	2.75	2.67	3.06	1.46	2.49	1.58
Overall	3.28	3.32	3.42	2.04	3.01	1.73

For successful implementation of competency-based curriculum, the availability of learning materials or resources for instruction is crucial. The items presented to the participants were, ‘learning materials are well organized’(2.76), ‘learning materials for instruction are appropriate for the tasks’(2.84), ‘learning materials are available for every task’(2.83), ‘learning equipments and machines are relevant to the occupation in the world of work’(4.40), ‘learning materials are effectively utilized during instruction’(2.79), and ‘learning materials are comprehensive’ (2.49). The responses for all of these items are below the mean, which means that there are problems of availability and organization of learning materials for competency-based instruction.

Results of the study further reveal that consistent with the rating of the REP-CBT on CBLM evaluation (Table 17), the quality of learning materials ranked the lowest from among the six sub-components of the competency-based curriculum implementation. Comparing the trainers and trainees’ perception on the implementation of competency-based TVET curriculum in terms of the CBLM component as against REP-CBT experts, there is a big discrepancy as shown by the data. This indicates that although both ratings are low, a more accurate rating can be pointed to that of the REP-CBT experts because they are more knowledgeable and competent in conducting competency-based training as they are the team of experts responsible in conducting CB training or as TESDA calls it Trainers Methodology (TM) 1Course for TVET trainers in Region 12.

Analysis of the data further indicates that the lowest mean under this sub-component is 2.04 obtained by Housekeeping NC II. This can be attributed by the quality of learning material for Housekeeping NC II which is rated, ‘*does not meet the criteria.*’ The same CBLM does not include the basics of preliminary and instructional components such as the competencies to be achieved for a particular TVET program as rated by the Regional Expert Panel for Competency-Based Training.

Analysis of the data further indicates that the obtained mean of 2.04 or ‘below average’ rating in Housekeeping NC II can be attributed to the non-conformance of the learning material to standard because it was not at all a learning material but a compilation of information sheets taken from various sources as described by the REP-CBT experts. Although, the concerned trainer admits such, his claim of having a complete and standard CBLM for Housekeeping NC II kept in his desktop computer located within the training resource area may not have achieved its purpose for himself and his trainees. His intention of not giving the required CBLM to his students was verbalized when he said:

‘I prefer to give a compilation of information sheets to my trainees instead of CBLM because I observed that when my CBLM is released to my trainees, the next day or so it is copied by other schools, have it printed and sold to their trainees. It is very difficult to develop a CBLM so why should I give it to my trainees? What I do is keep a copy of my CBLM in my desktop computer and trainees have access to it anytime they need it.’

Another factor contributory to the seemingly not giving much value on developing a good CBLM is the failure of the Vocational Instruction Supervisor to require trainers to submit CBLMs for the HRM program. This was evident by a trainer saying:

‘It is very hard and tedious to develop CBLMs. We lack books and other reference materials. As technologies and trends in the hospitality sector are fast-changing we need internet access to be able to learn these and be able to come up with a good CBLM. So why should I bother? After all, it is not required anyway. As long as I have one, that’s it.’

Hence, because of the difficulty in developing CBLM, trainers did not put much effort to it. The need to have a good CBLM is entirely different when trainers submit their CBLMs and have them checked by supervisor with inputs for improvement than assuming that trainers have them well-organized following TESDA prescribed elements.

a.4 Entrepreneurship Instruction

Results of the study show the responses of trainees and trainers in entrepreneurship component of curriculum implementation by TVET program. The obtained mean is 4.12 for Bartending NC II, 4.43 for Food and Beverage Services NC II, 4.22 for Cookery NC II, and 4.24 for Housekeeping NC II. The obtained overall mean of 4.25 indicates an ‘above average’ level of implementation of the entrepreneurship instruction component of competency-based TVET curriculum. Table 3.6 below shows these results.

Entrepreneurship Instruction	Bartending NC II	Food & Beverage Services NC II	Cookery NC II	Housekeeping NC II	Mean	SD
Entrepreneurship education was incorporated in the classroom instruction.	4.12	4.37	4.5	4.25	4.31	2.08
Creativity of trainees was well articulated during entrepreneurship instruction.	4.12	4.25	3.62	4.37	4.09	2.02

Practical business innovations were integrated during entrepreneurship instruction.	4.12	4.37	4.37	4.25	4.28	2.07
Entrepreneurship practices were exercised in groups inside the class.	3.87	4.50	4.50	4.50	4.34	2.08
Entrepreneurship practices were exercised in groups outside the class.	4.00	4.37	4.25	4.00	4.16	2.04
Self-employment practices were incorporated well during entrepreneurship instruction.	4.50	4.75	4.12	4.12	4.37	2.09
Overall	4.12	4.43	4.22	4.24	4.25	2.06

Results of the study indicate that entrepreneurship education was well incorporated in the competency-based TVET curriculum (CBTC). Furthermore, creativity, practical business innovations, and self-employment practices both inside and outside the class were exercised during entrepreneurial instruction. This idea is supported by one participant when he said:

‘Entrepreneurship activities done by trainees inside and outside the classroom were product development and product costing where trainers ask students to compute for the cost of their product after it is presented to the class. Other related activities such as product packaging and product advertising to name a few were likewise done by trainees as part of their entrepreneurial activities.’

As the purpose of CBTC is to prepare trainees for employment and entrepreneurship, it is an important means and a valuable additional strategy to create jobs and improve the livelihood and economic independence of young people (Awogbenie and Iwuamadi, 2010). Hence, entrepreneurial education in support of CBTC can be an effective means to reduce unemployment and poverty.

Entrepreneurship instruction in the classroom was also taken as an important part of implementation of competency based TVET curriculum in this part of the study. The items presented to the respondents for this part include, ‘entrepreneurship education is incorporated in the classroom instruction’(4.28), ‘creativity of trainees was well articulated’ (4.28), ‘practical business innovations were integrated’(4.25), ‘entrepreneurship practices were exercised in groups inside and outside the class’(4.34, 4.31), and ‘self employment practices were well articulated during entrepreneurship instruction’(4.25). All of these items were rated above the mean by the respondents. This implies that entrepreneurship education was well practiced during the training as entrepreneurship and competency-based training are inseparable.

Entrepreneurship has the power to strengthen and change the attitude of trainees towards problems and risks and how they overcome them. The main purpose of competency based TVET training is to prepare trainees for employment and entrepreneurship facilitates employment opportunity for the trainees.

This view is supported by Awogbenle and Inwuamadi (2010), who stated that entrepreneurship is an important means and valuable strategy to create jobs and to improve the livelihood and economic independence of young people. Mostly, the effectiveness of competency based training is supported by entrepreneurship training. Entrepreneurship education enables trainees to be skilled, confident, creative and disciplined. The application of entrepreneurial competencies in their daily life empowers trainees to learn business and enhance

their social and life skills. In a nutshell, it is a solution to employment problems. As a result, TVET institutions should incorporate entrepreneurship education while implementing competency based TVET curriculum. According to Abubakar (2007) TVET entrepreneurship education can be integrated into a training program as an integrated or a simulated approach. The merged approach integrates entrepreneurial content into the existing courses. It combines entrepreneurship education throughout the program of the study with regular courses and students are introduced to the business concept. In the case of simulated approach, entrepreneurship can be given either somewhere in the middle or nearer to the end of a program so that trainees have already built their foundation skills and subsequently learn to solve complex problems. From this point of view, it becomes important to incorporate entrepreneurship education in competency-based TVET program because it motivates and prepare trainees to be competent and self- employed.

a.5 Assessment

In conducting competency-based assessment, the trainer needs to understand and be able to apply the technical procedure of assessment and be aware of certain principles. According to Deibisser (2005), there are four principles of assessment crucial to the conduct of assessment in a competency-based training. These principles are validity, reliability, flexibility and fairness.

Under TESDA regulations, assessments are done in two ways: 1) institutional, that is, assessment is done by trainers at the institution level to evaluate their trainees' competencies on a particular task/occupation; and 2) national, done by TESDA accredited assessors where students are given national certificate (NC I, II, III, IV, or V depending on the level of qualification) when they show competence to all of the learning outcomes while certificate of competence (COC) is given when a student pass a particular unit of competency/ ies. In both assessments, evaluation is done through actual demonstration of competencies, interview, and written tests for some TVET programs. It is also important that trainers adhere to TESDA policy that they cannot conduct assessment to their own students. Table 3.7 shows the responses of trainees and trainers in assessment component of curriculum design and delivery by TVET program.

Assessment	Bartending NC II	Food & Beverage Services NC II	Cookery NC II	Housekeeping NC II	Mean	SD
Assessment engaged students in applying knowledge and skills in the same way as they are used in the real world outside of school.	4.50	4.75	4.62	4.62	4.62	2.15
Assessment was continuous and covers all tasks to be performed and learned.	4.62	4.75	4.62	4.87	4.72	2.17
Assessment was based on actual demonstration of competency.	4.87	4.87	4.25	4.87	4.72	2.17
Trainees were made aware that assessment is based on occupational standards.	4.75	4.62	4.25	4.87	4.62	2.15
Students were aware of how and when competencies will be evaluated.	4.75	4.75	4.62	4.87	4.75	2.18

Assessment enabled trainees to show what they know by using simulated workplace.	4.50	4.12	4.75	4.62	4.50	2.12
Trainees were assessed against predetermined standards.	4.50	4.62	4.62	4.75	4.62	2.15
Overall	4.64	4.64	4.53	4.78	4.65	2.16

Results of the study indicate that the obtained mean for Bartending NC II, Food and Beverage Services NC II, Cookery NC II, and Housekeeping NC I are indicates an *excellent* level of implementation of the assessment component of competency-based TVET curriculum.

The overall mean of 4.65 or an '*excellent*' level of implementation could be attributed to the trainers' role as TESDA accredited assessor in their particular TVET program. Their role as national assessor allows them to get familiar with the technical processes of assessment and further developed their mastery in the conduct of assessment. Their experience as assessor made them understand that assessment is a continuous process, and that trainees are assessed against predetermined standards of a particular occupation, that assessment is based on actual demonstration of competency as students apply their knowledge and skills in the same way as they are used in real world outside of school using actual tools that reflect actual work area, and they knows exactly when to evaluate students' competencies.

This is supported by Perry and William (1994) statements agreeing that effective assessment system in competency based training should measure only what has been presented to the student, use sound principles of test construction, and be objective, comprehensive, systematic and continuous. From these points of view, we can conclude that competency-based instruction assessment is different from the traditional mode of assessment, and therefore, must be dealt with carefully.

Further results show that of the six sub-components of curriculum design and delivery, the assessment component shows the highest ratings which means that the assessment in the implementation of CBTC is done properly.

a.6 Record Keeping

Table 3.8 presents the responses of the trainees and trainers in record keeping component of curriculum design and delivery by TVET program. The obtained mean is 4.79 for Bartending NC II, 4.27 for Food and Beverage Services NC II, 4.27 for Cookery NC II, and 3.95 for Housekeeping NC II. The obtained overall mean of 4.66 indicates an *excellent* level of implementation of the record keeping component of competency-based TVET curriculum.

Record Keeping	Bartending NC II	Food & Beverage Services NC II	Cookery NC II	Housekeeping NC II	Mean	SD
There was a record of trainee's competencies during instructional processes using Trainee's Record Book.	4.82	4.62	4.75	4.50	4.67	2.16
Score/ performance of students were continuously	4.87	4.37	4.75	5.00	4.75	2.18

recorded.						
Progress record chart was used during the learning process.	4.75	4.50	4.25	5.00	4.63	2.15
Progress record chart was posted within the training area for easy monitoring of students' performance.	4.75	4.50	5.00	4.87	4.78	2.19
Overall	4.79	4.49	4.68	4.71	4.66	2.16

Results of the study reveal that the overall mean of 4.66 or *excellent* level of implementation can be attributed to the trainers' adherence to maintaining a very good record of trainees' performance during instructional process through the use of Progress Record Chart.

In competency based training, it is one of the activities that is of paramount importance and should not be overlooked. Thus, SUNAS administration initiated the printing of charts in a 4x8 ft size tarpaulin which were visibly posted in all training centers of the HRM Department. The Progress Record Chart is a familiar device in a TVET program and primarily a management tool that can be used by the trainers to determine instantly how each student is progressing in the acquisition of the pre-stated competence. It may not supply all the detailed information that the instructor may need but it contains all competencies as well as other details of recordings.

According to Perry and William (1994), effective record keeping in competency based training helps to report student progress accurately, assess student performance instantly, provide a detailed transcript for use by employers and supply documented evidence for program accountability. Also, it serves as a basis for evaluating program effectiveness and evaluating student performance. This implies that of CBC particularly record-keeping was properly implemented in SUNAS as shown by the overall mean of 4.66 (excellent) in all the TVET programs namely: Bartending NC II, Housekeeping, Cookery NC II, Food and Beverage NC II.

When analyzed by the components of CBC, *record keeping* ranked the highest, 4.66 followed by *assessment*, 4.64. This implies that trainers were able to carry out well the recording of the performance of trainees in the assessment. The next highest component is teaching-learning (presentation), 4.46; followed by identification of competencies, 4.30; entrepreneurship in instruction, 4.25; and the lowest mean was CBLM implementation, 3.01. The two components showing excellent implementation were assessment and record keeping. While the three the components namely: identification of competencies, teaching- learning (presentation), and entrepreneurship instruction have above average level of implementation while CBLM implementation was on the average level.

Finally, items intended to assess the practice of record keeping of trainees' progress were presented to the respondents. It was found out that record keeping is relatively well practiced during implementation of competency based TVET curriculum which is rated above the mean by the respondents.

b) Learning Materials

Learning materials in competency-based TVET training is very crucial in the delivery of the program because it provides trainers with guidance and resources for conducting or supporting learning activities; provide learners with a resource that will support an instructor-led delivery and will be a useful reference for future application of learning; provide learners and assessors with resources for understanding and completing assessments; and serve as a guide or resource for learners' self-paced learning. Table 3.9 shows the overall results of learning

materials evaluation as rated by the REP-CBT by TVET program as part of the implementation of competency-based TVET curriculum.

Table 3.9 shows the overall results of learning materials evaluation by TVET program as part of the implementation of competency-based curriculum.

Components	Learning Outcomes	Instructional Strategies	Problem Solving	Assessment	Personal Qualities	Average Weight	Descriptive Equivalent
	Mean						
Bartending NC II	3.00	0.00	0.00	0.00	0.00	1.40	Weak
Food & Beverage Services NC II	1.38	0.00	0.00	0.00	0.00	1.08	Weak
Cookery NC II	3.75	0.00	0.00	0.00	0.00	1.55	Adequate
Housekeeping NC II	0.00	0.00	0.00	0.00	0.00	0.00	Do not meet criteria
Overall	2.03	0.00	0.00	0.00	0.00	1.21	Weak

The overall mean of 1.21 indicates a *weak* level of implementation of the learning materials component of competency-based TVET training. Of the 4 TVET programs, Cookery NC II has the highest mean of 1.55 indicating adequate level of implementation while Housekeeping NC II got the lowest mean of 0.00 showing that learning material in Housekeeping NC II does not meet criteria. On the other hand, the obtained mean of 1.40 and 1.08 for Bartending NC II and Food and Beverage Services NC II respectively showed *weak* level of implementation.

As indicated in Table 3.9, the evaluation consists of five components namely: learning outcomes or competencies, instructional strategies, problem solving, assessment, and personal qualities that should be incorporated in the learning materials. The results are discussed below:

b.1 Learning Outcomes (Competencies)

High quality TVET curriculum rests on some important features. The first is represented by an assumption that future workers must possess a number of basic competencies both knowledge and skills before entering the workplace. These basic competencies need to be designed clearly in the learning material. Accordingly, results of the study reveal that among other components, the learning outcomes is the only component visible in the different learning materials in the four TVET programs except in the Housekeeping NC II. The highest obtained mean value is 3.75, Cookery NC II showing *excellent* level of implementation while the lowest is Housekeeping NC II with an obtained mean value of 0.00 showing *do not meet criteria*. The obtained mean of 3.0 in Bartending NCII indicates good level of implementation while Food and Beverage Services NC II obtained a mean of 1.38 which indicates weak level of implementation.

b.2 Instructional Strategies

The other important quality of competency-based TVET curriculum feature is represented by the need for an outstanding pedagogy coupled with teaching strategies. Criteria such as whether teaching strategies in the learning material engaged students in active learning and reflect the reality of the workplace, the instructional strategies are student-centered and include hands-on experiences, and teaching strategy is related to workplace experiences and to the job market needs were set. Accordingly, the Regional Expert Panel on Competency-Based Training (REP-CBT) rating indicated that instructional strategies is not incorporated in the learning materials in the four TVET programs as indicated by its mean value of 0.00 showing *do not meet criteria*.

b.3 Problem Solving

In this category, critical thinking skills and whether trainees are challenged to seek answers to complex problems in a creative way and seek new knowledge to solve problems were set as criteria to assess whether these problem solving strategy were incorporated in the learning materials or not. Accordingly, this component is not visible in the learning materials in all TVET programs as shown in the REP-CBT rating of 0.00 mean value indicating *do not meet criteria*.

b.4 Assessment

In this category, attempts have been made to assess whether activities required to measure trainees' knowledge, skills, attitudes, and values (KSAV) to facilitate learning are embedded in the learning materials and whether measures of KSAV are derived from learning competencies and were incorporated in the learning materials or not. As can be gleaned in Table 3.9, assessment as measures of KSAV is not incorporated in the learning materials of the four TVET programs as reflected by a 0 rating.

b.5 Personal Qualities

Trainees' character development consistent with what is required in the workplace, and trainees' character traits such as responsibility and time management were set as criteria to assess whether they were included in the learning materials or not. As can be seen from Table 3.9, these requirements do not show in the learning materials developed by teachers in the four TVET programs as reflected by the obtained 0 mean value.

In addition, the REP-CBT raters pointed out the shortcomings of the teachers in developing their learning materials during the focused group discussion. Accordingly, learning materials they have evaluated lack specific time of completion for the tasks/ activities, instructional sheets such as operational and task sheets, self check activities, work ethics, and answer keys. Moreover, the learning materials are mostly information sheets coming from variety of sources and were randomly pasted with no citations about their sources.

Results of the study further reveal that the quality of learning materials ranked the lowest from among the six sub-components of the competency-based curriculum implementation. It implies that learning materials preparation was not given serious attention by teachers. Further investigation during focused group discussion revealed that one of the factors contributory to non-conformance of learning materials to standards is the failure of the Vocational Instruction Supervisor to require trainers to submit Competency-Based Learning Materials (CBLMs) for the HRM program. This was evident by one of the trainer's saying:

'It is very hard and tedious to develop CBLMs. We lack books and other reference materials. As technologies and trends in the hospitality sector are fast-

changing, we need internet access to be able to learn these and be able to come up with a good CBLM. So why should I bother? After all, it is not required anyway. As long as I have one, that's it.'

Hence, because of the difficulty in developing CBLM, trainers do not put much effort to it. The need to have a good CBLM is entirely different when trainers submit their CBLMs and have them checked by supervisor with inputs for improvement than assuming that trainers have them well organized following TESDA prescribed elements. Another factor contributory to the seemingly not giving much value on developing a good CBLM is the issue on copyrights. According to the trainer in Housekeeping NC II:

'I prefer to give a compilation of information sheets to my trainees instead of CBLM because I observed that when my CBLM is released to my trainees, the next day or so it is copied by other schools, have it printed and sold to their trainees. It is very difficult to develop a CBLM so why should I give it to my trainees? What I do is keep a copy of my CBLM in my desktop computer and trainees have access to it anytime they need it.'

While it is true that it was not at all a learning material but a compilation of information sheets taken from various sources as described by the Regional Expert Panel on Competency-Based Training (REP-CBT) during the focused group discussion, his claim of having a complete and standard CBLM for Housekeeping NC II kept in his desktop computer located within the training resource area may not have achieved its purpose for himself and his trainees because learning materials ought to be in possession of the trainees during the training duration to guide them as learning in competency-based approach is individualized and self-paced. The qualitative data obtained from the interviews and focused group discussions strengthened the above findings and agree that there are indeed problems in the learning materials preparation in SUNAS.

In general, the four learning materials used by trainees in Bartending NC II, Food and Beverage NC II, Cookery NC II and Housekeeping NC II are weak as indicated by its overall mean value of 1.21. Thus, the four learning materials in HRM program were not designed according to the principles of competency-based instruction.

c) Teachers' Training

Among several factors and the most salient one that affect the quality of TVET, particularly in generating workers with qualified knowledge and skills is the quality of TVET trainers. Therefore, the quality of teachers' education is crucial to determine the knowledge and skills of future workers. Without adequate number of professionally qualified trainers, TVET cannot offer the qualified skilled workers (Rajesh and Majumdar, 2010). For the purpose of effective TVET training, teachers need to be well trained in both pre-service and in-service training programs.

The support of teachers' training in the implementation of competency-based TVET delivery is divided into: pre-service training, in-service training, and continuous professional development (CPD).

Table 3.10 indicates the summary on the results of teachers' support training in implementing competency-based TVET education in SUNAS by TVET program.

Components	Bartending NC II	Food & Beverage Services NC II	Cookery NC II	Housekeeping NC II	Average Weight	Descriptive Equivalent
	Mean					
Pre- Service Training	1.83	2.16	1.83	2.33	2.05	Below Average
In- Service Training	4.50	4.75	4.50	4.83	4.54	Excellent
Continuous Professional Development (CPD)	3.14	3.57	2.86	2.86	3.10	Average
Overall	3.16	3.49	3.06	3.34	3.26	Average

The overall mean of 3.26 indicates an *average* level of implementation of the teachers' training component of competency-based TVET curriculum. Table 7 further shows the level of implementation by sub-components. Although all TVET programs showed an *average* level of implementation in the teachers training component, the Food and Beverage Services NC II has the highest mean of 3.49 followed by Housekeeping NC II, Bartending NC II, and Cookery NC II with an obtained mean of 3.34, 3.16, and 3.06 respectively. This indicates that these teachers handling the four TVET programs in the 2-year HRM program have almost similar degree of pre-service, in-service, and CPD trainings. On the other hand, of the three components of teachers' training, the in-service training component indicates the highest far beyond the other two components with an obtained mean of 4.54 showing excellent level of implementation while the lowest is the pre-service training with an obtained average weight of 2.05 showing below average level of implementation. This implies that teachers' in-service training and the CPD contributed immensely in the successful delivery of the four TVET programs in SUNAS by developing their competence in their respective fields.

In tech-voc education, trainers should acquire basic concepts of competency-based training and develop practices of integrating theory with practice. Among several factors that affect the quality of TVET training, the quality of teachers is the most salient one. Without adequate number of professionally qualified teachers, TVET cannot offer effective training which could be realized when TVET teachers are properly trained in pre-service training that is supported by in-service training. Regarding pre-service training, ILO (2010) emphasized the importance of pre-service by stating that the objective behind a solid pre-service training for TVET teachers/ trainers is to lay the foundation for the building of professional capabilities in TVET teaching, including self- organization, combining practical and theoretical aspects of teaching and practicing multi- disciplinary team work. Regardless of these facts, the pre-service TVET teachers lacked competency-based principles of teaching and hands on practices which they should have acquired during their pre-service training. Moreover, the pre-service training was found to be insufficient and the solution for this is to provide effective in-service training to TVET instructors.

TESDA's in-service trainings intend to develop knowledge and skills of teachers in preparing competency-based curriculum, capacity of teachers to prepare competency based learning materials, capacity of teachers to properly use teaching materials, and teachers' capacity to maintain tools and machines to use for practical purpose. Accordingly, these items were responded positively by teachers. In addition, the role of in-service training in improving the capacity of TVET teachers' knowledge and pedagogical skills specific to TVET and its support for trainers to cope up with new technology in industries was practiced during in-service training. However, without updating their knowledge, skills and competencies acquired during pre-service training, TVET trainers will run the risk of rapidly becoming obsolete in their training capacity. This implies that in-service training for trainers is a very practical solution for increasing their professional level. Overall, it is very crucial to conduct in-service training to TVET teachers in the design and development of competency-based curriculum and delivery of competency based instructions, which are areas of critical problems, according to the interviews held with the Vocational Instruction Supervisor during the focused group discussions.

The last category regarding teachers' training in support of the implementation of competency based TVET curriculum is concerned with continuous professional development (CPD). It is a professional obligation of teachers to involve in CPD for quality teaching and to integrate the latest educational research for the success of educational programs. Without continuous updating of knowledge, skills and competencies through CPD, TVET trainers face problems of teaching or training in the rapidly changing technology. This is not the case in TESDA. Consistent with the focus group discussions made with the teachers, the supervisor and the school head, everyone agreed that as a result of rapidly changing technology and workplace situation, there is a continuous change of occupational standards that require updating of curriculum and training process. Hence, TESDA is keeping an eye on continuous training and CPD that update the knowledge and skills of trainers. TESDA provides activities called moderation where trainers of the same TVET program are gathered to discuss the recent trends in the tourism industry and retrain teachers when necessary, assess them correspondingly of the recent innovations with the help of experts from the industries. TESDA realizes the importance of CPD program in coaching and mentoring teachers/trainers.

d) linkage with industry and other sectors

Attachment to industries is one of the training modalities in the delivery of competency-based TVET curriculum. It provides formal placement of trainees in the workplace to facilitate the achievement of specific learning outcomes that would potentially lead to their employability after the training program. In TESDA, industrial attachment is encouraged because industries have the best and real-work learning resources for students to learn competencies and execute competencies learned at school or training institutions.

Table 3.11 presents the summary on the results of linkage with industries and other sectors component in implementing competency-based TVET education in SUNAS by TVET program.

Collaboration	Mean	SD	Descriptive Equivalent
to determine training needs	2.2	1.48	Below Average
initiated on the willingness of industry owners	4.6	2.14	Excellent
to gather labor market information	1.0	1.00	Very Poor
to craft occupational standards	1.0	1.00	Very Poor

to draft competency-based curricula and training plan	1.0	100	Very Poor
to craft government policy on industry partnership	1.0	1.00	Very Poor
to update and enhance the skills of trainees	2.2	1.48	Below Average
to forge strategic partnership	1.0	1.00	Very Poor
to forged linkage in the conduct of the on-the-job training (OJT)	5.0	2.34	Excellent
to immerse trainers with industries for proper guidance of trainees	1.0	1.00	Very Poor
to supported trainers In updating their knowledge and skills alongside new technologies in the tourism industries	2.2	1.48	Below Average
to evaluate training results	4.6	2.14	Excellent
to update and enhance knowledge and skills of the workers in the tourism industry	2.2	1.48	Below Average
to help trainees to acquire further knowledge and skills for their future job	4.6	2.14	Excellent
to interact closely on the conduct of tracer study	2.2	1.48	Below Average
for trainees to operate/ use the same devices at the work	3.8	1.95	Above Average
to upgrade curricula and teaching methods to adapt to rapid changes in technology.	2.2	1.48	Below Average
to plan and administer competency-based TVET program	1.6	1.26	Below Average
to allow trainees to practice the use of basic to the most high-end tools, materials and equipment	4.6	2.14	Excellent
to promote cooperation and understanding in advancing TVET	2.6	1.61	Average
to assign well trained experts to guide trainees in the development and practice of the required skills	4.6	2.14	Excellent
to support trainees to practice and handle new technology during cooperative training	2.6	1.61	Average
to update the curriculum to keep up with technological change	1.0	1.0	Very Poor
to provide essential tools, equipment, and other instructional technology and materials to improve instruction	1.0	1.0	Very Poor
to provide free or reasonable cost for technical assistance to upgrade trainers' training capabilities as part of their social responsibilities	5.0	2.34	Excellent
Grand Mean	2.80	1.70	Average

As indicated in Table 3.11, the overall mean of 2.80 shows *average* level of implementation in terms of linkage with industry and other sectors. Of the twenty five items presented for evaluation, only nine were responded positively indicating excellent level of implementation while eight were responded negatively indicating very poor implementation. The items that were responded positively are collaborations: initiated on the willingness of industry owners, 4.6; to update and enhance the skills of trainees, 4.4; to evaluate training results, 4.6; to forged linkage in the conduct of the on-the-job training (OJT), 5.0; to evaluate training results, 4.6; to update and enhance knowledge and skills of the workers in the tourism industry, 5.0; to help trainees to acquire further knowledge and skills for their future job, 4.6; to allow trainees to practice the use of basic to the most high-end tools, materials and equipment, 4.6; to assign well trained experts to guide trainees in the development and practice of the required skills, 4.6.; and to provide free or reasonable cost for technical assistance to upgrade trainers' training capabilities as part of their social responsibilities, 5.0.

On the other hand, eight items obtaining a mean value of 1.0, indicating *very poor* level of implementation are collaboration: to gather labor market information, 1.0; to craft occupational standards, 1.0; to draft competency-based curricula and training plan, 1.0; to craft government policy on industry partnership, 1.0; to immerse trainers with industries for proper guidance of trainees, 1.0; to forge strategic partnership, 1.0; to update the curriculum to keep up with technological change, 1.0; and to provide essential tools, equipments, and other instructional technology and materials to improve instruction, 1.0. Apparently, these collaborations were not practiced by SUNAS industry partners because these activities are solely

initiated between TESDA top level management and experts in popular industries in the tourism sector across the country.

Results of the study further reveal that five out of twenty five items under this category were rated *below average* while only two items were rated *average*. This implies that despite the many shortcomings in the attachment with industries component in the implementation of CBTC, the limited involvement of industry partners is strong and sufficient enough to develop trainees' competencies to prepare them for future job. While off the job training in SUNAS maybe weak or the other way around, this is being complemented by on the job training in the industries. Hence, the dual training modality is complementing each other and is found to be a very effective strategy in developing the competencies of trainees in the CBT education. As Choy and Hauka, (2009) postulates, industrial attachments typically involve training providers and industries or employers in forming partnership to offer situated learning opportunities in the workplace so that learners and TVET practitioners have access to authentic experiences that only the workplace can offer.

According to Kambyat and Shmal (2010), the complexities at a work place which are brought about by the rapid technological changes lead to a paradigm shift in education and training and the growing demand for skills training call for harmonized efforts to reverse the acute skill shortage. Hence, TVET providers and trainers should work in close collaboration with industries to explore the endless possibilities and derive new focus to address socioeconomic and technology-driven challenges. This implies that industries should support trainers to acquire the new technologies that exist in industries.

One notable point to look into with regards to industry attachment is that industries do not appear to support teachers to update their knowledge and skill alongside the new technologies in industries (as revealed on the table with mean value of 2.2). However, according to Kambyat and Shmal (2010), one of the challenges in the present time is the rapid pace of technology which makes skills obsolete at a greater pace before everyone else could learn from them. The excessive pace of technological changes has emphasized the need to integrate technological knowledge and skills in education and training to expand lifelong capabilities of knowledge based worker. According to Majumdar (2011), the characteristics of the work place as the supreme learning environment must be coordinated properly to ensure that there is a close correlation between the types of training that the workforce is being prepared vis-à-vis the work environment, tasks and work systems. Thus, since a weak linkage with local industries for hands on experience for trainers can lead to an ineffective and inefficient training of trainees, SUNAS needs to strengthen collaboration with industries to upgrade trainees' knowledge and skill, which were overlooked, according to the response of the respondents.

As indicated in the Table 3.11, industries do not play their role in updating and enhancing the skills of trainees. As a result of poor industry partnership, trainees are not adequately exposed to the appropriate work environment. This has a great impact on trainees' competencies required in the real work situations. In addition, trainees' employability may be influenced by mismatch of skills taught in school and what is practiced in the industry. Similarly, because SUNAS does not conduct tracer study and their interaction with industries is very limited, skill gaps crucial to program enhancement are left unidentified.

The other challenge, according to the response of the participants, is the claim that trainees are not given opportunities in industries to practice on the same devices operated at

work. This finding is similar with the qualitative data obtained from the focus group discussions conducted with the training coordinating teams.

One participant responded that:

“most of industries especially private ones are not willing to admit trainees for practice in their industries. They do not allow trainers and trainees even to touch materials in the industries. Industries only allow trainers and trainees to observe what is going on in the industries. Trainees do not have chance to practically practice in the industries. There is no chance to practice on the machines.

However, according to Majumdar (2011), exposing the future work force to the actual field work, industrial environment, state of the art science and technology adapted in machines and equipment operations and industrial practices provides ways to relate classroom theories with actual industrial experiences. Unfortunately, industries do not positively invite trainees to their factories. According to NICHE (2010) in developing countries, even where there is collaboration and willingness, industries do not have enough places to accommodate trainees, which cause overcrowding during internships. As a result, trainees end up without getting enough hands on experience.

One of the focus group discussion participants indicated that:

‘the system of cooperative training by itself has a problem. The number of industries, including small macro enterprises does not coincide with the number of trainees. Due to the large number of trainees, industries have become reluctant to admit trainees to their industries. There is an overcrowding of trainees in industries during cooperative training. Even there are industries which do not train trainees with their respective field of specialization’.

Furthermore, industries do not assign well trained experts to guide trainees to practice skills and they do not support trainees to practice and handle new technology during cooperative training. Besides, industries do not support TVET institutions by providing them with essential equipment, instructional technology, and learning materials. But the reality reveals that trainees must be provided with hands on work access to have appropriate tools and equipment, and be supervised during training at work in order to acquire the knowledge and skills they need to complete the apprenticeship. During cooperative training, trainees should have access to full range of tools and equipment commonly used by skilled workers in the industries. Trainees should be systematically exposed to the world of work and learn occupational practices in a real life situation. The characteristics of work place learning as a supreme learning environment must be coordinated properly to ensure that there is a close correlation between the type of training that the trainees are being prepared for and work environment, tasks and work system. Regardless of all these advantages, cooperative training was not properly practiced in SUNAS, according to the responses obtained from the respondents.

e) trainees’ perception

This part of the study was intended to assess whether the trainees have positive or negative perceptions of competency based TVET program in SUNAS. Mean and standard deviation were used for the analysis of trainees’ perception. Table 3.12 presents the perception of trainees on the implementation of CBT curriculum in SUNAS.

Items	Mean	SD
The goals are attainable and measurable.	4.56	2.13
It is practical in nature.	4.11	2.03
It improves employment opportunities for graduates.	4.78	2.12
Learning activities are easy and students can do them with less supervision from teachers.	2.25	1.50
It helps students acquire better work ethics.	4.78	2.12
It is less valuable compared with the other academic training programs.	2.75	1.66
It provides bright future for students.	4.67	2.16
It develops positive attitude of students towards work.	4.78	2.12
Skills are achievable and of high quality.	4.67	2.16
It is useful to the individual and the society.	4.67	2.16
It is superior than other academic education.	2.00	1.41
It is suitable for poor academic achievers.	2.75	1.66
It is appropriate in TVET education.	4.78	2.12
It is attractive and interesting.	4.89	2.21
It is for those who have no other alternatives.	2.25	1.50
It develops self confidence among the students.	4.33	2.08
It helps students cope up with rapidly changing world.	4.00	2.00
Learning activities are based on the reality in the workplace.	4.50	2.12
It can alleviate unemployment problem.	4.75	2.18
It can play a role in reducing poverty.	4.50	2.12
It enables trainees to be self employed.	4.25	2.06
It provides skills that trainees need in their life after school.	4.50	2.12
It develops students' entrepreneurial abilities.	4.25	2.06
The program is based on the principles of competency-based education.	4.56	2.14
It develops trainees' problem solving and decision making skills.	4.67	2.16
Grand Mean	4.12	2.00

As shown in Table 3.12, twenty five items of questionnaires were presented to the respondents in order to assess the perception of trainees towards the implementation of competency-based training. Out of those presented to trainers, 20 items were positively perceived while the remaining 5 items were negatively perceived. The grand mean for trainees' perception is found to be 4.12. Even though the majority of items were positively perceived, the negatively perceived items are important because trainees' perceptions have again coincided with the trainers, the common perceptions in the community and that of other developing countries.

From the items presented to the respondents, 'learning activities are easy and trainees can do them with less supervision from teachers (2.25), Competency based TVET program is less valuable compared with other academic programs (2.75), 'competency-based TVET curriculum is superior than other academic education' (2.00), 'competency based TVET curriculum is suitable for poor academic achievers' (2.75) and 'competency based TVET curriculum is for those who have no other alternatives' (2.25) were wrongly perceived by the trainees. Similarly, the above mentioned items represent some of the basic concepts negatively perceived by the public about competency based TVET program. Such perceptions might have adversely affected the development and implementation of competency based TVET program. The negative perception of society towards TVET program is also reflected by the trainees since trainees are part of the society.

The impact of trainees' perception on training program was supported by Wesselik, (2010), who stated that student perception can influence the nature and quality of teaching

process. In general trainees' perception of the meaningful learning environment can determine the learning results and in the same way, the negative perception of trainees may have negative impact on the competence of trainees' assessment. The negative perceptions of trainees on some important issues were also assessed by the focus group discussion held with the program coordinator. All participants agreed on the negative perception of trainees on some important issues. One participant of the focused group discussion verbalized that:

'Trainees perceived TVET program as if it is for those who are not academically successful. It is the course for slow learners, quitters and the poor. They join TVET program to pass time and do not give much attention to the training program. They drop and go for other possibilities whenever they get a chance.'

Thus, even though the grand mean is above the mean, that is 4.12, trainees' negative perception about competency based TVET program, as reflected by their responses to some items in the questionnaire can have a negative impact on their training.

a. Trainers' Perception

Twenty five questionnaire items with five-point Likert scale were designed and presented to the trainers to identify their perception towards competency-based TVET program. Mean and standard deviation were used for the analysis of the perceptions of the trainees.

Table 3.13 presents the perception of the four TVET trainers in the implementation of CBT curriculum embedded in the 2-year HRM program in SUNAS.

Items	Mean	SD
The goals are attainable and measurable.	4.50	2.12
It is practical in nature.	4.25	2.06
It improves employment opportunities for graduates.	4.50	2.12
Learning activities are easy and students can do them with less supervision from teachers.	2.00	1.41
It helps students acquire better work ethics.	4.50	2.12
It is valuable compared with the other academic training programs.	2.75	1.66
It provides bright future for students.	4.75	4.18
It develops positive attitude of students towards work.	4.25	2.06
Skills are achievable and of high quality.	4.25	2.06
It is useful to the individual and the society.	4.25	2.06
It is superior than other academic education.	2.25	1.50
It is suitable for poor academic achievers.	2.75	1.66
It is appropriate in TVET education.	4.50	2.12
It is attractive and interesting.	4.00	2.00
It is for those who have no other alternatives.	2.25	1.50
It develops self confidence among the students.	4.75	2.18
It helps students cope up with rapidly changing world.	4.00	2.00
Learning activities are based on the reality in the workplace.	4.50	2.12
It can alleviate unemployment problem.	4.50	2.12
It can play a role in reducing poverty.	4.50	2.12
It enables trainees to be self employed.	4.25	2.06
It provides skills that trainees need in their life after school.	4.50	2.12
It develops students' entrepreneurial abilities.	4.50	2.12
The program is based on the principles of competency-based education.	4.25	2.06
It develops trainees' problem solving and decision making skills.	4.50	2.12
Grand Mean	4.09	2.15

As can be gleaned from Table 3.13, the values of the mean for all variables are greater than the standard deviation. As a result, the mean would be an appropriate measure of central tendency for perceptions of the trainers.

As shown in the table from the given items, 20 were positively perceived, whereas the remaining 5 were negatively perceived. The grand mean for trainers' perceptions of competency based TVET program is 4.09. Even though the grand mean shows trainers' positive perception, the negatively perceived items are the basic ones because they spell out the trainers wrong perceptions which can affect the implementation of competency-based curriculum. The negatively perceived or responded items by the trainers are, 'programs are easy and students can do them with less supervision from teachers' (2.00), 'competency based TVET program is valuable compared with other academic programs' (3.75), 'competency based TVET program curriculum is superior than other academic education' (2.25), 'competency based TVET curriculum is suitable for poor academic achievers' (2.75), and 'competency based TVET curriculum is for those who have no other alternatives' (2.25). The items mentioned above reflects some of the poor perceptions that challenged the development of TVET program in developing countries like the Philippines. The above finding was also supported by the responses of the interviews made by the focus group discussions with the program coordinator.

According to one interviewee:

'The society gives lower position for TVET program. They assume that the trainees who learn in TVET are those who are academically weak and who do not have other alternatives.'

These findings about negative perception of competency based TVET program are consistent with the responses of the trainees that TVET is poorly perceived as a carrier path for the less academically endowed. Entry requirements in TVET institutions are normally lower than those of academic institutions, and this has led to negative perceptions that competency-based TVET program is suitable for poor academic achievers and competency based TVET curriculum is inferior to academic education. This idea complements with AU (2007), which stated the public and even the parents negatively perceive TVET as if it is fit only for academically less endowed. This idea also coincides with the negative perception covered in one of the items in this study, that is, 'competency based TVET curriculum is suitable for poor academic achievers. Therefore, though the grand mean showed positive perception, some of the negative perceptions on TVET that exist in different developing countries were positively reflected by both trainees and trainers. As a result, these perceptions may in one way or the other affect trainers' effort in the conduct of training.

g) National Assessment Results

Trainees' national assessment result is highly important for this study because the competence of trainees is determined based on TESDA national assessment results. The TESDA National Assessment Results obtained from SUNAS Assessment Focal is depicted in Table 3.14 below.

TVET Program	N	Results			
		Competent	%	Not Competent	%
Bartending NC II	48	45	94	3	6
Food and Beverage Services NC II	44	44	100	0	0
Cookery NC II	43	43	100	0	0
Housekeeping NC II	52	51	98	1	2
Total	187	183	97.9	4	2.1

As shown in the table above, only four (2%) of the respondents were not competent in the TESDA national assessment, whereas one hundred eighty three 183 or 98% were labeled competent. These results are consistent with the nationwide TESDA regional reports in 2016, in which 95% of the trainees were reported to be competent and only 5% were not competent. The national assessment result is the basis for TESDA to grant the National Certificate for a particular TVET program.

In the Philippines, trainees' national assessment result (competent or not competent) is considered for hiring whereas for overseas employment, TESDA national certificate is required to a skilled worker. Thus, those who succeeded in the national assessment will have higher opportunity to get employment, whereas those who are not successful are likely to have lesser opportunity to work.

II. Challenges Faced in Implementing Competency-Based Training in SUNAS

To identify the challenges encountered by trainees and trainers in the implementation of competency-based TVET curriculum in SUNAS, focused group discussions and individual interviews were made to draw responses from trainers, trainees, program coordinator, supervisor, head of school and industry partners and employers. These responses were then analyzed using SPSS where Variables Codebook was prepared. The analysis of data was based on the transcribed text from audio recorder and notes taken by the researcher. Significant statements and phrases were extracted from the transcript and meanings were formulated. The meanings were organized into themes based on the questions of the study and the themes became the categories of analysis. Thematic analysis was performed through the process of coding in six phases to establish meaningful patterns. These phases are familiarization with data, generating initial codes, searching for themes among codes, reviewing codes, defining and naming themes, and producing the final report. The final report was used to support the findings of the quantitative data.

Despite the fact that the four TVET programs under study have been implemented for ten years in SUNAS, it appears that challenges related to CBC implementation have not been addressed. This was made evident by the responses drawn from the interviews and focused group discussions. Among the challenges faced by trainers and trainees in the implementation of competency-based training were:

1. *Teachers lack in-service training on competency-based approach in delivering TVET program*

The responses compiled from teachers' questionnaire and interviews from trainers confirmed that lack of in-service training on competency-based instruction was one of the major challenges which affected the successful implementation of competence-based curriculum. Responding trainers (27.45) indicated that lack of training in competency-based instruction limited the teachers' pedagogical knowledge to apply competence-based approaches during the teaching and learning process. Although teachers were eager to implement CBC, the biggest challenge they faced was lack of knowledge and understanding about competency-based curriculum. As one of the trainers interviewed explained:

'I am eager to implement CBC, but the big challenge which I am facing is the lack of knowledge...i do not understand clearly the competency-based approaches because CBC was only discussed during the Trainers Methodology I training. I am sure that if teachers have better understanding of CBC approach, they would successfully implement it with confidence.'

One REP-CBT member who is also teaching TVET program has similar views and observed that lack of in-service training affected the implementation of competency-based curriculum in the teaching and learning process. She remarked:

[...] teachers have not received any follow up in-service training or seminar to keep them up-to-date with this approach to teaching. This is the biggest challenge which almost all the teachers in this school are facing. Everyone is struggling to use is approach because we are used to the traditional approach. That is why, CBC has not been effectively implemented here in our school.'

Another trainer sees this problem on the lack of follow-up training on CB approach and recommends:

'A follow-up training on CB approach has to be provided to make sure trainers deliver the TVET programs in a competency-based strategy. This is TESDA's mandate so we need to implement TVET programs that way. I believe TM I training is not enough for us to learn the new approach because it is new to us. We have been used to the traditional approach because this is what we are used to since we were students. Another way perhaps to enhance our understanding on this approach is mentoring. Trainers who are good at this approach are to be identified and may be assigned to assist a group of trainers who are less confident until they master the approach. During the mentoring process, they may hold group discussions to share their problems and experiences.'

The statements of the interviewees show that lack of understanding of the CB approach in delivering competency-based curriculum hindered the effective implementation in SUNAS. As a result, the teachers use the combination of CB and traditional approach in the delivery of CB curriculum.

2. *Learning materials do not conform to CBC principles*

Learning materials are weak and do not meet the criteria based on TESDA

CBLM rubric as indicated by the results of evaluation. In numerical terms, 18.63% REP-CBT members and trainers of Trainers Methodology mentioned the unavailability of appropriate teaching and learning materials which could help students actively participate in the teaching and learning process. When interviewed, one of REP-CBT member and CBLM rater said:

'CBLMs prepared by trainers need to be submitted for review as to whether they follow the TESDA template and appropriate comments and suggestions must be made to correct them. Not until this is done, nothing will happen to this problem. I guess, this is also happening to other TVET courses in the Agriculture Department.'

As CBLMs evaluated were mostly information sheets which were randomly taken from variety of sources without any references attached, this implies that trainers do not give importance to the development of a standard CBLM.

Another TVET trainer verbalized why his CBLM was all loose sheets of information. He explained that:

'I purposely gave loose sheets to my students because I have observed that my CBLM is copied by other private TVET institutions and have them reprinted and sold to their students. My efforts became their business...'

Regarding how this problem can be addressed, the head of the school who was also aware of this problem said:

'Developing a CBLM is difficult especially when one does not have the right understanding about competency-based training (CBT). If only TESDA will adopt the strategy of AGRITECH Project before, that is coming up with a uniform learning material for every TVET program by bringing together experts from the different TESDA supervised and administered schools in partner with industry experts on the field, then I'm sure we will not encounter this problem. I am confident that we are not the only TVET institution facing this problem because preparing CBLM is a very tedious task and requires time and appropriate resources. Relevant textbooks and reference books should also reflect the current curriculum (CBC). I observed that our reference books were too old and designed for the content-based curriculum not the CBC. As TESDA wants us to deliver the programs in competency-based approach, relevant textbooks and reference books have to be provided which match with the new curriculum. There is no way you can change the curriculum without preparing relevant textbooks that reflect that curriculum.'

3. Low ability of students joining TVET programs

Questionnaire and interview responses revealed that students joining TVET programs were mostly having difficulty with understanding the English language. As CBLMs are printed in English, students' ability to learn is affected. Hence, the CBT principle of learners learning at their own pace is not at all times applicable. This problem is supported by the numerical value in the questionnaire under teaching-learning (presentation) sub-group. Trainees with low ability posed a challenge to teachers in implementing CBC. Responding four trainers indicated that students enrolling in TVET programs have lower academic ability making it difficult to use learner-centered approaches to teaching and learning. These findings were also confirmed through interviews held with one of the trainers who confirmed that many of the students indeed,

have a low ability. They pointed out that some of them could hardly read and write properly. During an interview session, one trainer said:

'Low quality of students is a big challenge to us. The majority of the students who are enrolled in our programs are those who do not have other alternatives...they have low academic ability. So when they are given say, steps to follow in performing a particular task, they struggle understanding the steps printed in English.'

One REP-CBT trainer also provided a similar view. *She said:*

'I don't know what is wrong with our government...they don't take education seriously. We receive students with very low ability to the extent that some of them do not even know how to read and write properly. Every year, we give entrance test to incoming students but we do nothing about it. All students coming to enroll are accepted and results of entrance exams are just kept with no purpose at all. As a result, some students hardly knew how to read and understand things. Now tell me, how can a teacher use CBT approaches to assist such students to understand concepts?'

Under such circumstances, it is difficult to implement CBT in the teaching and learning process, particularly when the majority of the students have a low academic ability. For example, what does a teacher do with students who can hardly read and understand things?. Such students tend to depend entirely on their teachers to provide knowledge which is contrary to the principles of competency-based curriculum.

During interview session, one of the respondents commented regarding the problem on low ability of students joining TVET programs. He said:

'I think with the current curriculum, the government through TESDA needs to strengthen its advocacy programs to attract smart students entering tech-voc programs. As the tech-voc landscape is changed, more students will be inspired to enroll especially when people see how one's life is changed as a result of his tech-voc training.'

4. Students' readiness to accept learner-centered approach

Through questionnaires and interviews, the respondents reported the readiness of students to accept learner-centered approaches during teaching and learning as one of the factors hindering effective CBT implementation. In numerical terms, three teachers (75%) indicated that students were not ready to accept the learner-centered approach. After classroom observation, one teacher was asked why she relied on the lecture method, she explained:

'if you use learner-centered approaches, students think that you are not being fair to them as they like to be spoon-fed everything''.

Similarly, during an interview, one of the REP-CBT trainers said:

'Students do not like it when teachers use participatory approach to teaching. They think that you are not teaching them as they deserve. They like what we call spoon-feeding. I think the problem starts from primary school where students are taught everything without giving them an opportunity to construct their own knowledge.'

The implication is that students' lack of readiness to accept learner-centered approaches depends on their orientation from the primary school level. Because students were not prepared for competency-based teaching and learning from primary school, it becomes difficult for them to make adjustments with CBT approaches. These findings confirm that CBC needs to be introduced in the K to 12 so that when they enroll in TVET programs, they are ready for such teaching and learning approaches. As one respondent argued:

'It is imperative for students to be oriented towards competence-based curriculum starting in the primary just like in other countries. Such early exposure to CBC can help them get used to the learner-centered approaches early so that they would not have to struggle in the higher level of their education.'

5. CBC is expensive

As competency-based training provides hands-on experiences for students to learn the required competencies for the occupation, the school needs the necessary facilities, tools, materials, equipment, and other high-end machines. While most if not all of these resources are satisfied during program registration, the school opted to buy those that are of low quality because of financial constraints. As these are used regularly during instructional activities, they become easily damaged. As practiced, consumables during classroom instruction are provided by trainees like ingredients and liquefied petroleum gas (LPG) in Cookery NC II, wines, juices and other food items in Bartending NC II, foods, flowers etc. in the Food and Beverage Services NC II, and cleaning agents in Housekeeping NC II. Ninety nine percent of the trainees with their trainers agree that CBT is expensive.

One trainee commented:

'Why are we required to provide for the consumables during training when we are paying training fee of one thousand five hundred pesos (P1,500.00) every semester aside from other school fees?' We are not even informed about how our training fees are spent, and how much are being allocated for every TVET program? Some materials used during practice were also assigned to us like flowers during flower arrangement lessons, wines, juices, fruits and vegetables for garnishing, foods to be cooked, and cleaning materials like soap, floor wax and the like...'

This scenario poses a challenge to the trainees in the implementation of CBT. Most trainees who cannot provide the required materials cannot participate in the activities thus, contributes to absenteeism problem by students. A most laudable approach to solve this problem as recommended by one respondent is:

'All consumables during the course of the training need to be provided by institution to be taken from the training fee paid by the trainees. With proper allocation and transparency in the utilization of this fund, problems on irregularities will be avoided. It is the responsibility of the trainers to identify consumables necessary during the training. Hence, budget planning and preparation should emanate from the HRM Department. In turn, the management should provide the necessary fund for this purpose.'

Another important point to address the problem as recommended by the school head is for the government to increase the budget to boost the financial capacity of SUNAS to deliver TVET programs. He said:

'The government should increase the school budget. The amount which we receive is too small to run a school like this... They do not consider the increase in the number of students. It is my appeal to the government to reconsider supply of teaching and learning materials if they really want to improve quality of tech-voc education.'

It is evident that, the school's budget determines the availability of teaching and learning resources. The fact that SUNAS charges students with training fees only shows that support to teaching-learning materials is too limited to help boost the provision of quality education under the CBC.

6. Capacity of trainers to teach TVET in a competency-based approach

The delivery of TVET programs under TESDA supervision calls for the adoption of competency-based approach to teaching. While trainers are not familiar to this approach, effort has to be directed to assist them. With the current situation in SUNAS, the capacity of the trainers to deliver CBT approach poses a challenge because of the lack of understanding in the CBT strategies. Trainers tend to revert to traditional teaching especially in teaching knowledge component of the training. This happens because trainees do not have a full grasp of what CBT is and there is no classroom observation made to find out how well trainers are using the approach. One trainer went saying:

'I do not know really if what I am doing is CBT. I have attended Trainers Methodology I trainings but unless I am made to implement CBT with constant supervision and appropriate feedbacking is made, then perhaps I may will be forced to do and learn from it.'

7. Non-adoption of Cooperative Training in CBC

Cooperative training is an approach of training that takes place in the workplace. It brings TVET institutions and enterprises together with training. It is a cost effective mode of training that produces competent graduates/ professionals for the world of work. It has the capacity to provide a good opportunity for updating standards and curriculum in keeping them with the ever changing nature of technology.

While cooperative training is one of the modalities in the teaching-learning process and is encouraged, this feature of CBT is not practiced in all the TVET programs in SUNAS. For one thing, there is no government policy to support this program. One trainer sees the importance of cooperative training and was strongly in support of this approach when he said:

'Student losses the opportunity to learn skills and be exposed to real-word situations related to his/her TVET course. First, it will be risky to bring students outside the school without any legal basis. TESDA Region XII's seeming reluctance to send trainees outside their region contributes to school's unwillingness to forge partnership with industries for this purpose. Second, the school lacks real-work scenario for trainees to learn specific skill. While we may have similar tools, equipment or materials to be used to teach specific skill, our training center cannot provide the same scenario that only industries can provide.'

Looking into this scenario at SUNAS, there has to be some serious initiatives to improve the situation. One thing to consider is for the government to craft policy for social responsibility awareness. To encourage industries to get involved with increasing TVET consciousness and support, the government may offer tax reduction or other similar incentive for industries absorbing trainees for cooperative training. At the moment, industries attached to SUNAS have very limited involvement because of the lack of government support. On the part of SUNAS, it needs to strengthen its industry linkage together with the other sectors to have strong and meaningful partnership.

8. *Labor Exploitation of Trainees during OJT*

The provision of a qualified person to supervise trainees during OJT is one of the major concerns in the conduct of on-the-job training (OJT). The practice in SUNAS is that, when trainees are deployed for OJT, they are endorsed by the program coordinator leaving all the responsibilities to whoever is assigned in the industries. Chances are, trainees are open to exploitation.

Another TVET trainer opined that:

'There has to be a qualified person to supervise trainees like what is practiced in the Nursing program. Giving this partnership with industries a chance, students' performance to a particular competency can be developed, enhanced, and be assessed properly because trainees deployed to industries are closely monitored to learn and practice competencies required in the program. But because responsibilities were all left to the industry, they can do whatever they want such as assigning unattractive and less confident trainees to wash dishes, cleaning of comfort rooms, mopping of floors and the like. In some cases, industries utilize solely OJT trainees to perform labor work to cut operating expenses. When there is a school-hired person to supervise trainees, problems on labor exploitation is minimized.'

9. *Failure to conduct meaningful Curriculum Review*

The curriculum has to be reviewed regularly in order to make it responsive to the needs of the community and to meet the demands of the growing economy. In the case of SUNAS, the four TVET programs packaged under TESDA Training Regulation embedded in the 2-year HRM program were never reviewed since their offering in 2007. Initiatives to revise the program by changing the subjects to complement the TVET programs were made by a few school personnel and teachers who are directly involved in the 2-year HRM program were not involved. There were initiatives to change the subjects to complement TVET programs but reviewing the course content of these TVET programs was never conducted. Curriculum review allows the school to evaluate its effectiveness after it has been implemented. Hence, the same curricula were running in the past 10 years. Whether the decline in students' recruitment contributes to the non conduct of curriculum review remains a mystery. For school year 2017-2018, the total trainees enrolled in the 2-year Hotel and Restaurant Services (HRS) drops to nineteen in the first semester and further drop to sixteen in the second semester. Collective effort to look into this problem has to be the concern of everyone. Teachers should be involved in decisions regarding curriculum review due to the role they play as curriculum implementers. Responding TVET teachers underscored the importance of involving teachers to make them feel part of the curriculum development process, and not mere implementers. During interview one of the teachers explained:

‘We are just implementers of the curriculum in which we did not take part. They make decisions on their own and bring to us to implement of which we understand nothing. Worse still, they do not bother to educate us on how we are supposed to implement it. It is better to involve teachers in any curriculum changes because changes start from classrooms.’

Involving the teachers would make them feel comfortable with the competence-based curriculum they were being asked to implement in classroom. By implication, curriculum developers need to make sure that key education stakeholders such as teachers participate fully in the curriculum change process for them to understand what they are supposed to implement. Indeed, the involvement of teachers in curriculum development is important because it makes teachers feel part of the curriculum development process; it helps them to own the process.

III. Performance of Graduates as Perceived by Industry Partners and Employers

The performance of SUNAS graduates as workers in the tourism sector sums up the results of their knowledge, skills attitudes and values (KSAV) or competencies gained after their training in the 2-year HRM program in SUNAS. Table 3.15 shows the performance of SUNAS graduates at work as perceived by industry partners and employers.

Job Criteria	Mean	SD	Descriptive Equivalent
Motivation	3.2	1.79	Average
Attitude	3.8	1.95	Above Average
Communication Skills	3.2	1.79	Average
Interpersonal Skills	3.2	1.79	Average
Critical Thinking and Problem-Solving Skills	2.3	1.52	Below Average
Entrepreneurship Skills	2.2	1.48	Below Average
Overall	2.98	1.73	Average

Results show that the performance of SUNAS graduates in the workplace is *average* with an overall mean of 2.98. Table 3.15 further shows that the highest mean obtained is attitude, 3.8 and followed by motivation, communication skills, and interpersonal skills with an obtained value of 3.2. The lowest obtained mean is in critical thinking and problem-solving skills, 2.3; and entrepreneurship skills, 2.2. This implies that the performance of graduates can be improved overtime because of their above average level of attitude. As Shariq Abbas et al., (2012) opined that job attitude determines performance and productivity of the employees in various sectors of the industry.

Chapter 4

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Summary

The study was undertaken to evaluate the implementation of four competency-based TVET curricula embedded in the 2-year Hotel and Restaurant Management and to offer policy framework to enhance the delivery of TVET programs in SUNAS. In particular, the study aimed to evaluate the level of implementation of the competency-based TVET curriculum in SUNAS in terms of curriculum design and delivery, learning materials, teachers' training, linkage with industry and other sectors, trainees and teachers' perception towards the implementation of competency-based training, and the performance of students in the National Assessment. This study also sought to identify challenges faced in implementing competency-based curriculum, and the performance of graduates as perceived by industry partners and employers. Finally, this study was expected to provide policy framework to enhance implementation of competency-based TVET curriculum in SUNAS which may help other TVET institutions in the implementation of their TVET curricula.

In order to achieve the above items, the following basic questions were set:

1. What is the level of implementation of the competency-based TVET curriculum in SUNAS in terms of:
 - a. Curriculum Design and Delivery
 - b. Learning Materials
 - c. Teachers' Training
 - d. Linkage with Industries and other Sectors
 - e. Trainees' Perception
 - f. Teachers' Perception
 - g. National Assessment Results

2. What are the challenges encountered by teachers and trainees in the implementation of competency-based TVET curriculum in SUNAS?

3. What is the performance of SUNAS graduates as perceived by industry partners and employers?

4. What policy framework can be offered to enhance implementation of competency-based TVET curriculum in SUNAS?

This study made use of a mixed research approach to evaluate the level of implementation of competency-based TVET curriculum in SUNAS. That is, both quantitative and qualitative data were collected at a time. Questionnaire and interview questions developed by the researcher were used to collect data from the respondents. The validity and reliability of questionnaire were checked using coefficient of validity and Cronbach alpha. The sources of the data for the study were 128 trainees during school year 2016-2017, four teachers (teaching Bartending NC II, Food and Beverage Services NC II, Cookery NC II, and Housekeeping NC II), five faculty serving as Regional Expert Panel in Competency-Based Training for rating the learning materials, sixteen industry partners and employers, the program coordinator, the Curriculum Head, the vocational instruction supervisor, and the head of school. Purposive

sampling was used to select the respondents. Percentages, mean values, grand mean were used for data analysis.

1. The overall level of implementation of competency-based curriculum in SUNAS is *above average*. This implies that competency-based TVET curriculum is properly implemented in SUNAS in the four TVET programs namely: Bartending NC II, Food and Beverage NC II, Cookery NC II, and Housekeeping NC II. When analyzed by sub-components, trainees' perception and performance in the National Assessment ranked the highest while learning materials was ranked the lowest. This implies that even with very poor learning materials, the delivery the program was carried out properly in that the trainees learned the required competencies in each of the TVET programs embedded in the 2-year HRM as evident by the excellent performance of the trainees in the National Assessment. Furthermore, trainees' and teachers' positive perception on program implementation may have contributed to their excellent performance in the National Assessment.

1.a The *curriculum design and delivery component* of competency-based implementation is *above average*. This implies that competencies to be achieved by trainees were properly identified and presented to the trainees.

1.b The *learning materials component* of competency-based implementation is *very poor*. This implies that even with poor learning materials and given the right attitudes of both the trainees and teachers, excellent performance of trainees in the National assessment is likely to happen.

1.c The *training of teachers component* of competency-based implementation is *average*. This implies that for a successful implementation of TVET programs, teachers' pre-service, in-service, and continuous professional development are important to develop and enhance the capacity of teachers to teach.

1.d *The linkage with industry and other sectors component* of competency-based implementation is *average*. This implies that for TVET programs to be effective, industries and other sectors in the community needs to be strengthened because learning is best conducted in real-work settings that only industries can best provide.

1.e The *perception of trainees component* in the implementation of competency-based is *excellent*. This implies that trainees' attitude towards competency-based curriculum can have better impact on their learning.

1.f Similarly, *teachers' perception component* in the implementation of competency-based is *above average*. This implies that teachers' attitude towards competency-based can have better impact on the teaching-learning process.

1.g The trainees performance in the National Assessment is *excellent*. This implies that given a better outlook on the implementation of competency-based curriculum, the program is likely to succeed.

2. The challenges encountered by trainees and teachers in the implementation of competency-based curriculum, are:

2.a Insufficient training on competency-based approach in delivering TVET program

- 2.b Learning materials do not conform to CBC principles
- 2.c Low ability of students joining TVET programs
- 2.d Students' readiness to accept learner-centered approach
- 2.e Competency-based training is expensive
- 2.f Capacity of trainers to teach TVET in a competency-based approach
- 2.g Non-adoption of cooperative training in CBC
- 2.h Labor exploitation of trainees during OJT
- 2.i Failure to conduct meaningful curriculum review

3. The performance of graduates as perceived by industry partners and employers is *average*. Results further show that of the six attributes, The SUNAS HRM graduates were rated *above average* in their attitude and *average* in motivation, communication skills, and interpersonal skills. However, their rating on critical thinking, problem-solving, and entrepreneurship skills is below average. This implies that the performance of graduates in the workplace can be improved overtime given the right attitude.

Conclusions

On the basis of the foregoing findings, the following conclusions are drawn:

1. For effective implementation of competency-based TVET curriculum in SUNAS, the development of quality competency-based learning materials following TESDA's Assessment rubric must be taken seriously by TVET trainers. As competency-based instruction is self-directed and learning depends on the pace of learners for mastery of learning competencies, the need to have quality learning materials to support learning is crucial. Learning materials allow learners to perform repeated and remedial learning on their own until they achieve mastery of the required competencies. Failure to address this problem may impede on the successful implementation of competency-based training during the teaching and learning process. Likewise, as teachers are the major implementers of the competency-based instruction, the findings have shown that there is a need to provide more opportunities for their participation during formulation and/ or review of the curriculum. Doing so may allow teachers to play their roles effectively in curriculum development, eventually implementation.

a. TESDA should devise ways of providing quality and relevant teaching and learning resources that are consistent with competency-based curriculum. The school under this study should make sure that all the relevant courseware such as competency-based learning materials are developed and fully disseminated to all the students. Likewise, because of the rapid advancement in technology, internet connection in the training centers is also necessary to update trainers and trainees of the recent trends in the tourism industry. According to the results of the study, there is a failure to develop competency based TVET curriculum materials according to the principles of designing competency-based curriculum. From the study it is concluded that CBLM are weak and do not meet the criteria based on CBC. It was revealed that CBLMs were not organized and comprehensive. The study further revealed that entrepreneurship is poorly practiced during the training and assessment is not based on the principles of competency-based assessment during the training.

b. Based on findings, teachers training is another important factor for the implementation of competency-based TVET curriculum. From the study, it can be concluded that teachers' pre-service training, in-service training and CPD program are poorly practiced and this situation has contributed to the ineffectiveness of competency-based TVET training.

c. Industry linkage is among the important factors that influence the competence of trainees. From the study it can be concluded that SUNAS and industry linkage did not play their joint role in producing competent, skilled and educated workforce that is relevant to the real world of work. The study has also revealed that industries do not provide the necessary support during on-the-job training for lack of government support to provide incentives for their involvement in TVET. Another constraint in the program implementation is the non-practice of cooperative training which allows learners to practice the necessary skills in a real work situation which affect their work performance when they get employed.

d. In the study, assessment was conducted to determine the competence of trainees in the national assessment. Although, the performance of trainees in the National Assessment is high and their chance of getting employment is bigger, the wrong perception of trainees about the potential of competency-based TVET training to alleviate unemployment may have an impact on their career path.

e. Regarding trainers and trainees' perceptions towards competency- based TVET curriculum, although the grand mean revealed positive perceptions, other important variables that affect implementation of competency-based program were unfavorably perceived both by trainers and trainees. Interestingly, the study concluded that both trainees and trainers have the same wrong assumptions on competency-based TVET program such as: it is less valuable compared with other programs, it is inferior to academic education, it is suitable for poor academic achievers, and it is for those who have no other alternatives. Hence, entry to TVET would be difficult.

Recommendations

Based on the key findings and conclusions from this study, the following recommendations are categorized into two (2) levels:

1. POLICY AND PROGRESS LEVEL

At the policy and progress level, the following five (5) recommendations are outlined:

1.a Competency-based TVET curriculum materials preparation

The study revealed the shortcomings of competency-based TVET curriculum teaching learning materials. As a result, it becomes advisable if TESDA and TVET institutions jointly engage participants with profound knowledge of occupational standards different educators, curriculum experts and industry experts in the preparation of competency based TVET curriculum materials. Furthermore, TESDA and TVET institutions should give practice-based training on competency-based TVET curriculum material preparation for trainers.

1.b. Implementation of competency-based TVET curriculum

The study has found out that important components during training like identification of competencies, competency-based teaching learning strategies, entrepreneurship instruction and competency-based assessment were well-practiced except for the availability and organization of learning materials. As competency-based instruction is characterized by self-paced learning, that is allowing learners to move through a course at different rate or at their own pace along with their trainers facilitating their learning and providing frequent feedback, the use of a variety of self-paced learning strategies and learning materials/ modules is necessary. This can only be achieved with the provision of a well-developed and organized CBLM. Furthermore, it should be noted that without proper learning materials (CBLMs) in delivering competency-based instruction, trainers tend to go back to the traditional approach in teaching. When this happens, important habits like self-reliance and independence so beneficial in gaining and holding employment that competency-based instruction can help develop may not be learned by the learners, (Watson, 1991). Thus, it is of utmost importance that TVET officials pay serious attention in developing competency-based learning materials for students.

1.c. Trainees and trainers' perception

Trainers and trainees perception was revealed to be positive towards implementation of competency-based curriculum in the study. However, some important misconceptions which have impact on the effectiveness of competency-based TVET curriculum were reflected both by trainers and trainees. Thus, government and TESDA should use media for awareness creation on the role of TVET in poverty and unemployment reduction. Although wrong perception about TVET exists both in developing and developed countries, China solved the problem of the image of the society by opening TVET universities (Ratnata, 2013). Similarly it seems advisable if the government promote some TVET institutions to higher institutions to improve the image of TVET in the society and on the trainees.

1.d. TVET industry linkage

The study revealed poor TVET-industry linkage. Thus, the government and TVET officials should play their part in establishing TVET policy framework and strategy into practice. The government should use different options like tax reduction, rewarding and providing incentives to participating companies to motivate industry owners and micro and small enterprises to cooperate fully with TVET institutions for cooperative training.

1.e. Teachers training

Among different factors that affect the quality of TVET, the quality of teachers is the most prominent one. Quality TVET teachers are the result of quality TVET teachers' training (pre-service, in-service and CPD). Although, the study revealed *average* TVET teachers' training, their capability to deliver competency-based instruction is insufficient. Therefore, it is advisable if pre-service TVET teachers' training institutions recruit competent students for pre-service TVET teachers training. Pre-service TVET teachers training institutions should create comprehensive pre-service teacher education programs targeted towards TVET subjects and focused on competence that emphasize learning by doing in a way that is related to workplace reality. Likewise, TESDA and TVET institutions should assess skill gaps and provide tailored in-service training to enhance the skill of trainers. Equally important they should recruit trained instructors rather than recruiting teachers who are not. CPD is a key factor in determining and raising the quality of teachers at all levels of schools. It is a vital component in providing teachers with recent and relevant knowledge. It overcomes TVET teachers deficient in the school

workforce. Therefore, it has to be embedded as a one component in TVET teachers' professional activity by TESDA and TVET institutions.

2. RECOMMENDATIONS FOR FUTURE RESEARCH

This study was conducted to evaluate the implementation of competency-based TVET curriculum in SUNAS mainly on the analysis of the views of trainers, trainees, industry partners and employers, program coordinators, supervisor, and the head of school. Much of the study has focused on how curriculum was designed and delivered, teaching- learning process, emphasizing on how competency-based TVET curriculum materials were designed, the principles used during training, trainees and trainers' perceptions of competency based TVET curriculum, teachers' training, and TVET-industry linkage, and the performance of trainees in the national assessment. Furthermore, the delivery of quality competency-based TVET is closely linked to the building of strong management and leadership capacity to drive the entire system. Unfortunately, this aspect was not included in this study. Therefore, further investigation of the impacts of management system including views of curriculum experts and industry experts on the effectiveness of competency-based TVET curriculum is highly required. Likewise, further investigations are desirable to conduct correlation and regression analysis where the dependent variable is defined by the performance of the school and the independent variables are the competency-based TVET curriculum factors, and to probe the bothersome result of the present study which showed weak evaluation result for learning materials. In addition, it is worthwhile to investigate how national assessment is currently going on and the nature of testing the competence of the trainees.

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